

Integration of a heterogeneous compute resource in the ATLAS workflow

Tuesday 10 July 2018 16:40 (20 minutes)

High-Performance Computing (HPC) and other research cluster computing resources provided by universities can be useful supplements to the collaboration's own WLCG computing resources for data analysis and production of simulated event samples. The shared HPC cluster "NEMO" at the University of Freiburg has been made available to local ATLAS users through the provisioning of virtual machines incorporating the ATLAS software environment analogously to a WLCG center. In addition to the provisioning of the virtual environment, the talk describes the on-demand integration of these opportunistic resource into the Tier-3 scheduler in a dynamic way. Resources are scheduled using an intermediate layer that monitors requirements and requests the resources needed .

The performance of the virtualized environment is evaluated. Recent developments on monitoring and work toward

Authors: BUHRER, Felix (Albert Ludwigs Universitaet Freiburg (DE)); GAMEL, Anton Josef (Albert Ludwigs Universitaet Freiburg (DE)); SCHNOOR, Ulrike (Albert Ludwigs Universitaet Freiburg (DE)); SCHUMACHER, Markus (Physikalisches Institut-Albert-Ludwigs-Universitaet Freiburg-Unk)

Presenter: BUHRER, Felix (Albert Ludwigs Universitaet Freiburg (DE))

Session Classification: Posters

Track Classification: Track 7 –Clouds, virtualization and containers